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DEVELOPING ASSESSMENT INSTRUMENTS FOR MEASURING THE EFFECTS
OF GROUP COUNSELING IN THE TEACHER-EDUCATION PROGRAM AT
WASHINGTON STATE UNIVERSITY. FINAL REPORT.
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WASHINGTON STATE UNIV., PULLMAN
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INVENTORY, PERSONAL A.T.E. INVENTORY, CALIFORNIA PERSONALITY
INVENTORY

THE CENTRAL PURPOSE OF THIS RESEARCH WAS TO SELECT PREDICTIVE INSTRUMENTS FOR EVALUATING GROUP COUNSELING SESSIONS DESIGNED TO ENHANCE THE MENTAL HEALTH OF PROSPECTIVE ELEMENTARY TEACHERS. A SUBSIDIARY FURPOSE WAS TO FORMULATE A PROPOSAL FOR A GROUP COUNSELING PROGRAM. UTILIZING Q-SORT PEER AND INSTRUCTOR RATINGS ON MENTAL HEALTH (SELF-ACTUALIZATION) AS CRITERION VARIABLES, NUMEROUS STANDARDIZED AND NEWLY CONSTRUCTED INSTRUMENTS CONTAINING CONCOMITANTS OF MENTAL HEALTH WERE TESTED ON SEVERAL GROUPS OF PROSPECTIVE ELEMENTARY TEACHERS AT WASHINGTON STATE UNIVERSITY. CORRELATIONAL ANALYSIS INDICATED THAT THE CALIFORNIA PSYCHOLOGICAL INVENTORY AND THE PERSONAL ORIENTATION INVENTORY CONTAINED NUMEROUS SUBTESTS PREDICTIVE OF THE CRITERION VARIABLES. A TEST OF ADAPTIVE FLEXIBILITY WAS ALSO FOUND TO BE PREDICTIVE. AN ATTITUDE TOWARD TEACHER EDUCATION INVENTORY WAS JUDGED USEFUL ON THE BASIS OF CONSTRUCT VALIDITY AND HIGH RELIABILITY. THE CRITERION MEASURES THEMSELVES BEING HIGHLY RELIABLE WERE JUDGED TO BE USEFUL IN EVALUATING THE EFFECTS OF GROUP COUNSELING OF PROSPECTIVE AND BEGINNING ELEMENTARY TEACHERS. A PROPOSED PLAN FOR GROUP COUNSELING OF PROSPECTIVE AND BEGINNING ELEMENTARY TEACHERS WAS SUBSEQUENTLY FORMULATED AND SUBMITTED TO N.I.M.H. THE RESEARCH ON ASSESSMENT INSTRUMENTS AND THE CONSULTATION WITH VARIOUS RESEARCHERS WERE REFLECTED IN THE PROPOSAL. (AW)

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FINAL REPORT Contract No. 0E-6-10-225

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June 1967

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

> Office of Education Bureau of Research

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

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Developing Assessment Instruments for Measuring The Effects of Group Counseling in the Teacher-Education Program at Washington State University

Contract No. 0E-6-10-225

Frank B. May and William P. McDougall

June 1967

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Washington State University

Pullman, Washington



TABLE OF CONTENTS

																										Page
int	roductio	n	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	ı
	Problem Related Objecti	LITE	ra	rur	е	•	•	•	•	•	•	•	•	•				_			_	_	_			ı
Met	hod																									2
	Intervi Written Experim	vara	•	•	•	•	•	•	•	•	•	•	•		•			_	_	_	_	_	_			2 2 2
Res	ults and	Disc	uss	ic	ก	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	6
Cond	ciusions	and	I mp	Hi	са	†i	OF	ıs	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
Sum	mary .	• • •	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	8
Refe	erences	• • •	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	9
Арре	endix A,	Inst	rum	en	ts	С	on	st	ru	ıçt	ed	f	or	S	itu	ıdy	,									
Арре	endix B,	Item	An	aly	ys	is	а	nd	I C	or	re	la	†i	on	a l	D	at	a								
	endix C, and Firs N.I.M.H.	st-Yea	ose ar	d F Ele	-m	an en	f ta	or ry	· G	irc ich	up	C	ou Te	ns ac	e I he	in ers	g S	of ubi	P	ro tt	sp ed	ec †	ti o	ve	:	

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INTRODUCTION

Problem

The mental health of children is affected daily by the behavior of teachers, only some of whom have superior self-insight and a capacity to appreciate and help others. Ways must be found to increase the capacity of teachers to understand and accept themselves and respect their pupils. One possible approach is to provide prospective teachers with an opportunity to gain greater insight into themselves and others through group counseling sessions. Before launching a full-scale program of group counseling it was first necessary to determine which methods of evaluating such a program might be most effective:

Related Literature

There is a considerable amount of research evidence indicating that positive benefits may accrue from counseling. Although much of this research pertains to the secondary level of education, it seems appropriate to extrapolate these research data on the probable effectiveness of counseling from the secondary to the university level. Since there are too many studies in this area to cite all of them, only a representative sample will be mentioned here. Serene (18), Stasek (20), Baymur (1), and Broedel (2) have reported the effectiveness of counseling in improving the academic achievement of adolescent "underachievers." Turney and Morehead (23), Lund (12) and McLaughlin (15) have reported the effectiveness of counseling on improving the academic achievement of a heterogeneous group of high school students.

Counseling has also been effective in helping students acquire self-understanding, according to studies by Froehlich and Moser (8), Singer and Steffire (19), and Rothney (17). Studies by Caplan (5), Worbois (24), and Broedel (2) indicate that counseling encourages self-acceptance as well as self-understanding. Counseling has also been effective in helping students make realistic vocational choices. This effectiveness has been indicated through studies by Hutson and Webster (11), Turney and Morehead (23), Nick (16), Bunting (3), and Hutson and Webster (11). Counseling also leads to greater job satisfaction, according to reports by Cuony and Hoppock (6), Rothney (17), and Cantoni (4).

Group counseling of prospective teachers has been utilized to a limited extent in at least three studies sponsored by the National Institute of Mental Health. These studies were as follows: I. Teacher Education Project at San Francisco State College; 2. Wisconsin Teacher Education Research Project at the University of Wisconsin and 3. "Mental Health in Teacher Education" at the University of Texas. In all three of these studies a great variety of assessment instruments were utilized or developed. A fourth study sponsored by N.I.M.H., this one directed by the Bank Street College of Education, concentrated solely on assessment devices which might be useful in predicting the degree to which mental health would be encouraged by a particular classroom teacher.



Objectives

- A. To develop instruments for assessing prospective elementary teachers' attitudes toward self, peers, children, teaching as a profession, and the teacher-education program.
- B. To develop instruments for assessing prospective elementary teachers' aptitudes for creative thinking.
- C. To devise a feasible plan for including group counseling in the Teacher-Education Program at Washington State University.

METHOD

A. Interview Data -- Personnel from several institutions, all of which had been involved in teacher education and mental health projects sponsored by N.I.M.H., were interviewed. They were asked to expand upon their written reports concerning group counseling practices and to discuss evaluative instruments used to assess the effectiveness of their teacher education programs. The institutions visited were as follows: Bank Street College of Education, University of Texas, and San Francisco State College.

In addition, several counselor educators were interviewed at the American Personnel and Guidance Conference in Dallas, Texas with regard to effectiveness of various group counseling approaches and techniques of measuring outcomes of group counseling. Also, Charles O. Neidt, Professor of Psychology from Colorado State University was consulted on evaluative devices and research designs.

- B. Written Data -- Several reports of research sponsored by N.I.M.H. were purused, including reports from Bank Street College of Education, University of Texas, San Francisco State College, and University of Wisconsin. In addition, critiques on evaluative instruments, reported in Buros' Mental Measurement Yearbooks, Psychological Abstracts and other library sources, were examined. Also, several books and articles on mental health and counseling were considered for their ideas on the concomitants of mental health and on appropriate counseling techniques.
- C. Experimental Data -- A variety of evaluative instruments were administered to several groups of prospective elementary teachers in their junior and senior years at Washington State University. Scores on these instruments were correlated with two criterion variables which will be discussed later. The instruments were administered in two rounds, the second round following item analyses and other judgmental procedures.
- Round A: The following instruments were administered to approximately 70 juniors who are prospective elementary teachers: (Copies of all newly constructed instruments appear in Appendix A).



1. Self-Actualization Peer Rating -- This was one of two criterion variables. Since our future counseling program is designed to facilitate a greater degree of mental health among prospective elementary teachers, it was necessary for evaluation purposes to develop one or more criterion variables related to mental health. As peer ratings have demonstrated high reliability in previous studies this technique was utilized. It was felt, however, that college juniors would feel more comfortable rating each other on "self-actualization" rather than "mental health." Since self-actualization is synonomous with our concept of mental health, we used the former term as the focus for the peer rating.

Maslow's description (13) of self-actualization was used in developing a definition to be given to the students. The students were given directions for a five-category Q-sort of the students in their laboratory section of an educational methods course. Four laboratory sections were involved, with approximately 18 students in each section. A self-actualized person was defined for the students as follows:

- A. Spontaneous, natural, enthusiastic learner
- B. Free, not too inhibited, not rigid
- C. Accepts and understands self, appreciates others, capable of deep friendship, non-hostile sense of humor
- D. Self-starting, independent thinker, committed to goals.

Essentially, each student was rated by every other student in his laboratory section on a five point scale. A copy of the instructions for rating appears in Appendix A. These scores were averaged for each laboratory section and multiplied by ten to remove the decimal point. To obtain an estimate of reliability the students in each laboratory section were divided randomly into two parts and a split-half coefficient was computed. The Spearman Brown reliability coefficient was .88.

2. Self-Actualization Instructor Rating -- This was the second criterion variable and based on essentially the same procedures as the peer rating. The instructor of each lab section was given directions for a five-category Q-sort of the students in his section. The definition of self-actualization was the same as that used in the peer rating procedure. An estimate of reliability was obtained by having the instructors rate the students twice, with a two-week interval separating the two ratings. The test-retest reliability coefficient was .93.

The correlation between the two criterion variables was .54. Although we would have preferred a higher correlation, it still seemed advisable to combine the two criterion variables. To do this it was necessary to first multiply the instructor ratings by ten, the same procedure used with the peer ratings. Since both the peer and instructor ratings had been normalized by means of a Q-sort and the reliability of both was high, this simple arithmetic combination seemed reasonably justifiable.



- 3. Minnesota Teacher Attitude Inventory -- This is a standardized instrument consisting of 150 statements designed to sample opinions about teacher pupil relations. It yields a single score which is supposed to predict how well a prospective teacher will get along with pupils and how well satisfied he will be with his chosen vocation.
- 4. California Personality Inventory -- This is a standardized instrument consisting of eighteen scales related to personality development. It yields eighteen scores, one for each part.
- 5. Personal Orientation Inventory -- This is a standardized instrument consisting of twelve scales pertaining to self-actualization. It yields fourteen scores, one for each part and also two ratio scores.
- 6. Object Uses -- This test is based on Guilford's Brick Uses Test (10) and consists of four sub-tests. The first two sub-tests (Pencil Uses and Brocm Uses) are designed to measure spontaneous flexibility--a type of creative thinking ability. The last two sub-tests (Table Knife Uses and Needle Uses) are designed to measure adaptive flexibility--also a type of creative thinking ability. Administration, scoring procedures, and reliability are described thoroughly in an article by May and Metcalf (14). Spearman-Brown reliability coefficients computed for this population were .67 for spontaneous flexibility and .76 for adaptive flexibility.
- 7. What I Want to Be -- This adjective check list (Q-sort) was designed by May and McDougall to ascertain the degree of creative attitude of prospective teachers. The purpose of the check list was to determine the degree to which a prospective teacher aspires to exhibit those qualities which highly creative people tend to exhibit.

Subjects were presented with 36 adjectives and asked to sort these into seven categories in such a way that the distribution would be normalized. The seven categories were on a scale from most descriptive to least descriptive of "what you want to be or like to be."

The subjects were unaware of the fact that twelve of the adjectives describe highly creative individuals, twelve describe the opposite of highly creative individuals, and twelve describe individuals who are neither high nor low in creativity. Six sub-constructs related to creativity were used in developing appropriate adjectives: autonomous, goal-oriented, flexible, adventurous, visionary, and perceptive. Two creative and two non-creative adjectives were selected to represent each of the six sub-constructs. The twelve neutral items were selected randomly from other adjective check lists. If they were considered to be neutral by both of the investigators, they were included in the inventory.

Item analysis revealed that several of the "creative" adjectives and non-creative" adjectives did not show a significant discrimination between the upper and lower 27 per cent. Also, some of the "neutral" items did show a significant discrimination, which would indicate that they were not neutral

with respect to the major variable in the inventory. As a further check on the adjectives, 29 graduate students in the W.S.U. Guidance Institute were asked to classify each of the 36 adjectives as to whether it indicated a creative personality, a non-creative personality, or neither a creative or non-creative personality. Results of the item analysis and the judgments by Guidance Institute students are shown in Tables I and 2, Appendix B. As a result of these two types of analyses, several new adjectives were selected for the second round of testing.

8. A.T.E. Inventory (Attitude Toward Teacher Education at W.S.U. Inventory) -- This inventory was developed by Research Assistant, James D. Flynn under the guidance of Professor May. It is designed to measure the general attitude of prospective teachers toward the teacher education program at Washington State University. It is assumed that any future counseling program would probably affect this generalized attitude. It was not assumed, however, that scores on this inventory would correlate highly with the criterion variables.

The A.T.E. Inventory was developed by using a modified version of the "scale discrimination" technique advocated by Edwards (7). Items were generated by two techniques: (1) asking a group of approximately 90 seniors to "write two favorable and two unfavorable statements regarding the W.S.U. Teacher-Education Program." Since the seniors remained anonymous the comments were spontaneous and proved to be quite useful in developing many of the items. (2) inventing items which were off-shoots of the following three questions:

(a) How do you feel about most of the teachers you have had in the Department of Education?

(b) How do you feel about the value of what you have learned

in most of the education courses?

(c) How do you feel about those relationships with your fellow education students resulting from your experiences within the Department of Education?

These three questions also served as categories for grouping and modifying the statements made by the group of seniors. About 100 statements were generated by using the two techniques described. These statements were edited, using Edward's informal criteria(7) and given to sixteen graduate students in the field of education to judge on a seven-point scale. The judges were told to assume that a future subject agreed with all of the statements and to rate each statement according to this question: "How favorable is this person's attitude toward the W.S.U. Teacher Education Program?" The resulting judgments yielded scale values and Q values as shown in Table 3, Appendix B. It was arbitrarily decided to retain those items with Q values of 1.20 or less. This left a remainder of seventy items with Q values ranging from .57 to 1.20. These seventy items were administered to a pilot group of 68 juniors using a Likert-type scale and procedure. Phi coefficients were then computed on the basis of the top and bottom 29 per cent (29 percent was used rather than 27 percent for ease of computation). Table 3, Appendix B contains the phi coefficients. All of the items having a coefficient of .50 or more were

retained, yielding a total of 32 items. These items were ranked according to scale value and divided into two forms. Two of the items were eliminated to improve the balance, and the remaining thirty items were used for the final form, consisting of two parallel forms to be administered at the same time. The coefficients of reproductibility were .67 for Form A and .76 for Form B. The reliability coefficient of this inventory was .90.

- Round B: The following instruments were administered to approximately 100 juniors who are prospective elementary teachers (none of these students were in Round A.):
- I. Self-Actualization Peer Rating -- This was exactly the same instrument as in Round A, and the same procedures were followed.
- 2. What I Want to Be -- The revised form of this was administered. Item analysis again revealed that some of the adjectives were not suitable. (See Table 2, Appendix B). It was hypothesized that the "neutral" items were detracting from the unidimensionality of the check list and their omission would increase the discrimination coefficients of the remaining items. Consequently, they were omitted and the remaining 24 adjectives were administered to the same group. Item analysis showed that some of these adjectives were still not discriminating (See Table 2) and therefore they were omitted prior to final scoring. An estimate of reliability was obtained by the splithalf technique -- making sure that an equal number of creative and non-creative adjectives were in each half. The Spearman-Brown coefficient of reliability was .67.
- 3. Gough Inventory -- This instrument is simply a selection by Gough of 15 items from his California Personality Inventory. It was designed as a quick check on creative potential.

RESULTS AND DISCUSSION

Correlation analysis (in addition to item analyses and other judgmental procedures already discussed) was considered sufficient for purposes of this study. The correlations for between the predictive and criterion variables are shown in Table 4, Appendix B.

The following variables correlate significantly (.05 level with the combined criterion variables:

- 1. Object Uses total of parts 3 and 4. This score is a measure of adaptive flexibility and will be retained for future use in assessing our group counseling program.
- 2. California Psychological Inventory -- dominance, sociability, self-acceptance, achievement via conformance, and psychological mindedness. These variables all seem to relate to our definition of self-actualization or mental health. Because of this and because the correlations are reasonably high for five of the scales (.36 to .50) the CPI will be retained for future use in assessing our group counseling procedures.

- 3. Minnesota Teacher Attitude Inventory -- Although the correlation between this variable and the combined criterion variable was significant, it was only .27. Since the inventory contained a total of 150 items, such a low correlation does not make the investigators confident of its usefulness as an assessment device for future use. Furthermore, with only a single score it is difficult to interpret.
- 4. Personal Orientation Inventory -- time competent, inner directed, spontaneity, self-regard, nature of man constructive, synergy, acceptance of aggression, other directed inner directed ratio. These variables all seem to relate to our definition of self-actualization or mental health. One would hope for higher correlations (they were only .17 to .30) but it is understandable that the correlations would be lower for the POI than the CPI, since the CPI has three times as many items.

For Round B there were only two correlations between the predictive and the criterion variables. The correlation of the Gough Inventory with the criterion variable (peer rating) was .18. The correlation of the revised What I Want to Be check list with the criterion was .09. Since neither of these correlations were significant it was decided to retain neither the Gough Inventory nor the What I Want to Be Check List.

CONCLUSIONS AND IMPLICATIONS

Correlations between criterion and predictive variables indicate that the following predictive instruments should be retained as assessment devices for our group counseling program:

- 1. Object Uses -- Parts 3 and 4 (Total of Parts 3 and 4 yields a score of adaptive flexibility). To increase the reliability of this test, it is anticipated that Parts I and 2 will also be used, but scored for adaptive flexibility rather than spontaneous flexibility.
 - 2. California Personality Inventory
 - 3. Personal Orientation Inventory
- 4. A.T.E. Inventor -- This instrument will be retained even though it did not correlate signification by with the combined criterion variables. Since it is not a personality inventory it was not expected that it would correlate significantly with the criterion variables. As it appears highly reliable and has content validity it should prove useful to us in assessing the effects of the counseling program on the attitudes which students have toward the teacher education program.

In addition to the predictive instruments one or both of the criterion measures will probably be utilized to increase the confidence in our comparisons between those who receive counseling and those who do not.

The proposed plan for group counseling, of prospective and first year elementary teachers in the W.S.U. Teacher Training Program is described in Appendix C.



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SUMMARY

The central purpose of this research project was to select predictive instruments for evaluating group counseling sessions designed to enhance the mental health of prospective elementary teachers. A subsidiary purpose was to formulate a group counseling program proposal.

Programs involved in teacher education and mental health projects at Bank Street College of Education, University of Texas, San Francisco State College and University of Wisconsin were thoroughly studied both through interview and written reports and an extensive examination of the literature on mental health and counseling was conducted. The concept of mental health evolving from this research defined the mentally healthy teacher as one characterized by creativity and qualities of self-actualization as described by Maslow.

Q-sort peer and instructor ratings of mental health (self-actualization) were found to be highly reliable and were utilized as criterion variables. Numerous instruments, both tandardized and newly constructed, containing concomitants of mental health were validated against these criterion variables utilizing several groups of prospective elementary teachers at Washington State University as sample groups. Standardized instruments tested were the Minnesota Teacher Attitude Inventory, California Test of Personality and the Personal Orientation Inventory. Specially constructed were the Object Uses Tests of Spontaneous and Adaptive Flexibility, the What I Want to Be Adjective Check list designed to measure creative attitudes and an Attitude Toward Teacher Education Inventory designed to measure general attitudes of prospective teachers toward the teacher education program.

Correlational analysis indicated that the California Personality Inventory and the Personal Orientation Inventory contained numerous subtests predictive of the criterion measure. The test of Object Uses when scored for adaptive flexibility was a significant predictor. The A.T.E. Inventory was judged useful even though it did not correlate significantly with the criterion since it was highly reliable and it was designed for use in assessing the effects of the counseling program on attitudes of teachers rather than as a personality measure. The criterion measures themselves, being highly reliable were judged to be useful in evaluating the effects of group counseling of prospective and beginning elementary teachers.

A proposal for group counseling of prospective and first-year elementary teachers was formulated and has been submitted to the National Institute of Mental Health. The proposal reflected the results of the foregoing assessment of predictive and criterion measures and also the consultation with various researchers concerned with mental health in teacher education.

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APPENDIX A

INSTRUMENTS CONSTRUCTED FOR STUDY

A CHARLES

This group has been selected for a pilot study sponsored by the U.S. Office of Education. You are asked to respond to a brief series of questions in order to help us make important decisions about future changes in the teacher education program at W.S.U.

The results of these inventories will be used for research purposes only. They will have absolutely no effect upon your grades in any course or on your future as a teacher.

Your cooperation will be greatly appreciated.

Note: If you object to answering inventories of this nature you are not required to do so. You will not be penalized in any way for not participating.

Naturally we hope you will participate since the data we are seeking will help us to make important changes in the Teacher Education Program.

SELF-ACTUALIZATION PEER ASSESSMENT

You have been involved in an important study which will affect the teacher education program at W.S.U. in the near future.

We would appreciate your further participation in this study. We would like to know whether university students can effectively rate some of their fairly well-known peers on the dimension called "self-actualization."

Do not put your name on the rating sheet. This information will be kept strictly confidential. It will in no way affect the present members of the study.

A self-actualized person is characterized as follows:

- A: Spontaneous, natural, enthusiastic learner
- B. Free, not too inhibited, not rigid
- C. Accepts and understands self, appreciates others, capable of deep friendship, non-hostile sense of humor
- D. Self-starting, independent thinker, committed to goals

Instructions for rating:

- 1. Using the class list for your lab section, rate exactly _____ of your peers with the letter "M", meaning that these students seem to be the most self-actualized persons in your lab section.
- 2. Rate another _____ of your peers with the letter "L", meaning that these students seem to be the <u>least</u> self-actualized persons in your lab section.
- 3. Now circle the one ${}^{1}M^{11}$ student who seems to be the <u>most</u> self-actualized person in your lab section.
- 4. Circle the one "L" student who seems to be the <u>least</u> self-actualized person in your lab section.



OBJECT USES

Please print:		
NAME	· · · · · · · · · · · · · · · · · · ·	
Year at W.S.U.	Date	

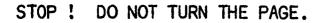
The tests you are about to take are designed to find out how well you can think of interesting ideas. These tests are different from most other tests you have taken. Instead of only one answer being right, many <u>different</u> answers may be right.

The test administrator cannot answer questions, because your questions might give away too much information. If you are not sure of an answer that you are thinking of, <u>put it down anyway</u>. It will <u>not</u> count against your score if it is wrong. Spelling mistakes will not be counted against you either, as long as your writing can be read.

PLEASE DO NOT TURN PAGE UNTIL INSTRUCTED TO DO SO.

TEST 1: PENCIL USES

List as many uses as you can think of for one or more pencils. You will have only three minutes. 2._____ 5.____ 6.____ 8.____ 9.____ 12.____ 13._____ 14._____ 15. 16.____ 17.____ 18. 19. 21. 22._____ 23. 24.____





TEST 2: BROOM USES

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TEST 3: TABLE KNIFE USES

List as many uses as you can think of for one or more table knives. In this test try to list many <u>different kinds</u> of uses. Besides listing cutting uses, also list other kinds of uses.

Take your time. Don't hurry on this test. 6._____ 10. 11.____ 12. 14. 15._____ 17._____ 18.____ 20._____ 21._____ 22.

25.

TEST 4: NEEDLE USES

List as many uses as you can think of for one or more sewing needles. In this test try to list many <u>different kinds</u> of uses. Besides listing sewing uses, also list other kinds of uses.

Take your time. Don't hurry on this test.	
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TOP! DO NOT GO BACK TO ANY OF THE TESTS.	``

What I Want to Be (Form P2)

On the next page is a list of 36 adjectives which might be used to describe people. Please complete each of the following steps as quickly as you can.

- 1. Put an M in from of exactly 12 of the adjectives which are most descriptive of what you want to be or like to be.
- 2. Put an L in front of exactly 12 of the adjectives which are least descriptive of what you want to be or like to be.
- 3. Now select one adjective from the 12 marked M which is the most descriptive of what you want to be or like to be. Circle this adjective.
- 4. Select three adjectives from the 12 marked M which are the next most descriptive of what you want to be or like to be. Put a check mark in front of these three adjectives.
- 5. Now select one adjective from the 12 marked L which is the least descriptive of what you want to be or like to be. Circle this adjective.
- 6. Select three adjectives from the 12 marked L which are the next least descriptive of what you want to be or like to be. Put a check mark in front of these three adjectives.

NAME *		Circle: Senior	r, Junior, Sopnomore
1.	visionary	19.	pleasant
2.	attractive	20.	generous
3.	inactive	21.	contented
4.	self-confident	22.	warm
5.	conservative	23.	unconcerned
6.	efficient	24.	sophisticated
7.	original	25.	satisfied
8.	flexible	26.	cheerful
9.	affectionate	27.	goal-directed
10.	jolly	28.	wary
11.	inquisitive	29.	docile
12.	idealistic	30.	natura
13.	curious	31.	practical
14.	adventurous	32.	self-governed
15.	reasonable	33.	persevering
16.	cautious	34.	submissive
17.	non-rigid	35.	kind
18.	certain	36.	controlled

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May/1732

^{*}Necessary for research purposes.

INAME.		Circle: Senio	or, Junior, Sophomore
1	visionary	13	certain
2	inactive	14	contented
3	self-confident	15	unconcerned
4	conservative	16	satisfied
5	original	17	goal directed
6	flexible	18	wary
7	inquisitive	19	doci le
8	idealistic	20	practical
9	curious	21	self-governed
10	adventurous	22	persevering
11	cautious	23	submissive
12.	non-rigid	24	

<u>\$</u>:

M/1802

^{*}Necessary for research purposes.

Gough Inventory

Name*
Mark + on statements which generally describe you. Mark 0 on statements which generally do not describe you. Please do not omit any items. Respond to items quickly and spontaneously.
I. Once I have made up my mind I seldom change it.
2. I am very careful about my manner of dress.
3. I am often so annoyed when someone tries to get ahead of me in a line of people that I speak to him about it.
4. I always follow the rule: business before pleasure.
5. Compared to my own self-respect, the respect of others means very little.
6. At times I have been so entertained by the cleverness of a crook that I have hoped he would get by with it.
7. I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer.
8. I commonly wonder what hidden reason another person may have for doing something nice for me.
9. Sometimes I rather enjoy going against the rules and doing things I'm not supposed to.
II. I get annoyed with writers who go out of their way to use strange and unusual words.
12. For most questions, there is just one right answer, once a person is able to get the facts.
13. I would like the job of a foreign correspondent for a newspaper.
14. Every boy ought to get away from his family for a year or two while he is still in his teens.
15. The trouble with many people is that they don't take things seriously enough.
* Necessary for research purposes.
May/1732

Name	

Attitude Toward W.S.U. Teacher-Education Program

Form S1

)

The following is neither an achievement test nor a personality inventory. There are no right or wrong answers. Your response will not affect your grades in any way. Your cooperation will help us to improve the Teacher-Education Program at W.S.U.

Please respond to each statement according to your present belief. Circle SA if you strongly agree with the statement; A if you agree; MA is you midly agree; MD if you mildly disagree; D if you disagree; and SD if you strongly disagree.

Please do not spend more than 15-20 seconds on each item. The entire inventory should take no more than 8-10 minutes. Please do not omit any items.

	•	Strongly Agreee	-	•	Midly Disagree	Disagree	Strongly Disagree
1.	The Teacher-Education Progradoes not provide many opportion meaningful relationship	rtunities	;				
	fellow education students.	SA	A	MA	MD	D	SD
2.	The Teacher-Education Progr	ram en-					
	courages creativity.	SA	A	MA	MD	D	SD
3.	Most education courses are	a waste				,	
	of time.	SA	A	MA	MD	D	SD
4.	The education courses enable maximize strengths and minimaximate.)				
	weakness as a teacher.	SA	A	MA	MD	D	SD
5.	Much of the course work in Teacher-Education Program !						
	little real meaning.	SA	A	MA	MD	D	SD
6.	The Teacher-Education Progrenough direct contact with	ram lacks	;				
	children.	SA	A	MA	MD	D	SD
7.	Learning to accept oneself by the Teacher-Education	is foste	red				
	Program.	SA	A	MA	MD	D	SD
8.	Most education instructors teachers.	are good SA	A	MA	MD	D	SD
		WA E	4.8	* 44.5	- 46/		DD.

9.	Education courses tend to help students lose some of their inhibitions.	SA	A	MA	MD	D	SD
10.	Most of the Teacher-Education Program should be omitted.	SA	A	MA	MD	D	SD
11.	The Teacher-Education Program does not help one to appreciate others.	SA	A	MA	MD	D	SD
12.	If one does not receive enough individual attention in the Teacher-Education courses it is one's own fault.	SA	A	MA	MD	D	SD
13.	The tests given in education courses are generally of value to students.	SA	A	MA	MD	D	SD
14.	The experiences provided in many education courses help one to become more spontaneous and natural.	SA	A	MA	MD	D	SD
15.	Most education courses enable one to profit from other students.	SA	A	MA	MD	D	SD
16.	The Teacher-Education Program meets the needs of its students.	SA	A	MA	MD	D	SD
17.	The Teacher-Education Program helps to pre- pare one for life.	SA	A	MA	MD	Ð	SD
18.	The Teacher-Education Program helps one gain confidence in oneself.	SA	A	MA	MD	D	SD
19.	Most education courses are too general.	SA	A	MA	MD	D	SD
20.	Most education courses are quite practical.	SA	A	MA	MD	D	SD
21.	The Teacher-Education Program helps one to find oneself.	SA	A	MA	MD	D	SD
22.	The opportunities for independent thinking are not very great in education courses.	SA	A	MA	MD	D	SD
23.	The education courses are an insult to one's intelligence.	SA	A	MA	MD	D	SD
24.	The students in the Teacher-Education Program are treated with respect by the education instructor.	64	4	2.2.	•	_	
25.		SA	A	MA.	MD.	D	SD
	One of the positive features of the Teacher-Education Program is the breadth of experiences.	SA.	A	MA	MD	D.	SD

26.	Education courses are too redundant	SA	A	MA	MD	D	SD
27.	The Teacher-Education Program seems to follow a logical sequence.	SA	A	MA	MD	D	SD
28.	The student observation experiences in the Pullman Schools are too un-realistic.	SA	A	MA	MD	D	SD
29.	The Teacher-Education Program does not really prepare one to teach.	SA	A	MA	MD	D	SD
3 0.	Much of the material covered in the education courses will be of benefit.	SA	A	MA	MD	D	SD

NOTE TO STUDENT:

Please see if you have omitted any items.

APPENDIX B .

ITEM ANALYSIS AND CORRELATIONAL DATA

TABLE I

JUDGMENTS OF 29 GUIDANCE INSTITUTE STUDENTS ON ORIGINAL ADJECTIVES IN THE WHAT I WANT TO BE ADJECTIVE CHECK LIST

Adjectives	Most ·	Least	. Neutral	. Theoretical
Efficient	4	7	18	N
Inquisitive	29	0	0	M
Attractive	0	5	24	N
Flexible	28	0		M
Self-confident	26	Ö	3	M
Contented		19	9	į.
Conservative	0	29	Ó	ī
Controlled	0	25	4	ĩ
Generous	2	2	25	N
Reasonable	2 2	10	17	N
Thrifty	Ō	18	ii	N
Informed	16	0	13	N
Docile	0	27	2	Ë
Tactful		16	12	N
Cautious	0	28	ī	Ë
Complacent	0	25	4	Ĺ
Progressive	26	0	3	M
Cheerful	5	2	22	N
Submissive	0	29	0	Ĺ
Warm	0	0	29	N
Tolerant	7	5	17	M
Practical		19	9	Ĺ
Thoughtful	16		12	N
Firm	0	17	12	Î.
Wary		18	10	Ĺ
Adaptable	28	0		M
Humb i e	0	11	18	Ĺ
Friendly		0	28	N
Certain	2	21	6	Ë
Adventurous	29	0	0	M
Sophisticated	1	8		N
Independent	25		20 3	M
Visionary	29	Ó	Ō	M
Goal-oriented	27	2 0	0 0 3 9	M
Courageous	26	Ō	3	M
Industrious	16	4	9	M

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TABLE 2

THE WHAT I WANT TO BE ADJECTIVE CHECK LIST ITEM DISCRIMINATION COEFFICIENTS DERIVED FROM FLANAGAN'S TABLE

	Administration			
Adjectives	First	Second	Third	
	N=70a	N=93b	N=879	
Visionary	.53	.64	.40	
Self-confident	.66	.40	.00	
Original		.37	.62	
Flexible	.41	.46	.31	
Inquisitive	.41	.52	.37	
Idealistic		.09	.08	
Curious		.26	.56	
Adventurous	.65	.40	.53	
Non-rigid		.40	.41	
Goal-directed		.44	.50	
Self-governed		.28	.50	
Persevering		.47	.52	
Inactive		.00)	
Conservative	.45	.14	.00 .45	
Cautious	.27	.33		
Certain	.27		.41	
Contented	.37	.42	.59	
Unconcerned	.5/	34	.83	
Satisfied		1	.09	
Wary	.53	.47	.67	
Docile	.29	.28	.00	
Practical	.44	.44	.34	
Submissive	.46	.30	.62	
Controlled	2	.30	.25	
Attractive	.48	.00	.32	
Efficient	07	21		
	18	12		
Affectionate		29		
Jolly		29		
Reasonable	21	18		
Pleasant		56		
Generous	15	21		
Warm	.14	.17		
Sophisticated	.11	.06		
Cheerful	.07	.04		
Natural		13		
Kind		18		
Thrifty	32			
Informed	.35			

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TABLE 2--Continued

•	Administration			
Adjectives	First N=70a	Second N=93b	Third N=87C	
Tactful Complacent Progressive Thoughtful Firm Adaptable Humble Friendly Independent Goal-oriented Courageous Industrious Tolerant	21 .19 .24 21 .08 .00 .29 28 08 08 08			

as% level of significance = .27

b5% level of significance = .20

c₅% level of significance = .25

TABLE 3

SCALE VALUES, Q VALUES, AND PHI COEFFICIENTS ON THE FINAL THIRTY ITEMS IN THE A.T.E. INVENTORY

	ltems	S Value	Q Value	Phi Coefficients
1.	The Teacher-Education Program does not provide many opportunities for meaningful relationships with fellow education stu-	2.30	1 .0 0	.510
	dents.	2.50	1.00	.510
2.	The Teacher-Education Program encourages creativity.	6.30	.93	.551
3.	Most education courses are a . waste of time.	1.09	.57	.775
4.	The education courses enable one to maximize strengths and minimize weakness as a teacher.	5.93	1.20	.804
. 5.	Much of the course work in the Teacher-Education Program has little real meaning.	1.67	. 95	.551
6.	The Teacher-Education Program lacks enough direct contact with children.	2.64	1.14	.504
7.	Learning to accept oneself is fostered by the Teacher-Education Program.	5.63	1.07	.704
8.	Most education instructors are good teachers.	6.00	.66	.612
9.	Education courses tend to help students lose some of their inhibitions.	5.50	1.00	.804
10.	Most of the Teacher-Education Program should be omitted.	1.12	.61	.577



TABLE 3--Continued

	Items	S Value	Q Value	Phi Coefficients
11.	The Teacher-Education Program does not help one to appreciate others.	2.25	1.15	.500
12.	If one does not receive enough individual attention in the Teacher-Education courses it is one's own fault.	4.94	.89	.568
13.	The tests given in education courses are generally of value to students.	5.28	1.00	.546
14.	The experiences provided in many education courses help one to become more spontaneous and natural.	6.05	.64	.651
15.	Most education courses enable one to profit from other students.	5.88	.61	.600
16.	The Teacher-Education Program meets the needs of its students.	6.61	1.06	.800
17.	The Teacher-Education Program helps to prepare one for life.	5.88	`1 .13	.556
18.	The Teacher-Education Program helps one gain confidence in oneself.	5.72	1.00	.860
19.	Most education courses are too general.	2.63	1.13	.500
20.	Most education courses are quite practical.	5 .7 5	1.15	.700
21.	The Teacher-Education Program helps one to find oneself.	5.39	1.16	.714

TABLE 3--Continued

	items	S Value	. Ó Aslae	Phi Coefficients
22.	The opportunities for independent thinking are not very great in education courses.	2.50	1.08	.568
23.	The education courses are an in- sult to one's intelligence.	1.12	.61	.655
24.	The students in the Teacher-Education Program are treated with respect by the education instructor.	5.64	1.19	.539
25.	One of the positive features of the Teacher-Education Program is the breadth of experiences.	6.10	.80	.503
26.	Education courses are too redundant.	1.95	.73	.504
27.	The Teacher-Education Program seems to follow a logical sequence.	5.14	.73	.587
28.	The student observation experiences in the Pullman Schools are too unrealistic.	2.06	.89	.510
29.	The Teacher-Education Program does not really prepare one to teach.	1.61	1.07	.556
30	Much of the material covered in the education courses will be of benefit.	6.00	.58	.577



TABLE 4

CORRELATION OF PREDICTIVE AND CRITERION VARIABLES
FOR ALL INSTRUMENTS USED IN STUDY

	Criterion Variables		
Instrument	Self-Actualization Peer Assessment	Self-Actualization Instructor Assessment	Peer and Instructor Assessment Combined
Object Use Spontaneous Flexibility Adaptive Flexibility	.07 .32*	.26 .41*	.22 .42*
What I Want To Be Adjective Check List (W.I.B.)	.18	.03	.10
Minnesota Teacher Attitude Inventory	.12	.12	. 27*
Attitude Toward W.S.U. Teacher-Education Program (A.T.E.) Form A Form B	00 .04 05	02 .02 06	01 .04 07
California Psychological Inventory Do Dominance Cs Capacity for Status Sy Sociability Sp Social Presence Sa Self Acceptance Wb Sense of Well-being Re Responsibility So Socialization Sc Self-control To Tolerance Gi Good Impression Cm Communality Ac Achievement via Conformance Ai Achievement via Independence le Intellectual Effi-	.44* .12 .37* .10 .40* .08 .2205 .23 .21 .2104 .34*	.45* .11 .35* .09 .30* .12 .2407 .23 .18 .2003 .32*	.50* .12 .40* .11 .38* .12 .2607 .26 .22 .2304 .36*
ciency Py - Psychological-	.13	.04	.08
mindedness Fy - Flexibility Fe - Femininity	.44* 18 .02	.41* 04 06	.47* 10 03

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	Criterion Variables		
Instrument	Self-Actualization Peer Assessment	Self-Actualization Instructor Assessment	Peer and Instructor Assessment Combined
Personal Orientation Inventory			
T ₁ /T _C -Time Incompetence/ Time Competence 0/1 - Other/Inner T ₁ - Time Incompetence T ₂ - Time Competence	10 32* 06	01 14 .05	05 .23* .01
Tc - Time Competence 0 - Other 1 - Inner SAV - Self-Actualizing	.14 27* .29*	.15 04 .24*	.17* 14 28*
Value Ex - Existentiality Fr - Feeling Reactivity S - Spontaneity	.!6 .!0 .!7* .29*	.14 .04 .09 .12	.16 .07 .13 .20*
Sr - Self Regard Sa - Self Acceptance Nc - Nature of Man Sy - Synergy	.20* .11 .11	.30* .11 .25*	.30* .12 .23*
A - Acceptance of Agression C - Capacity for Intimate Contact	.09 .22* .22*	.27* .23*	.24* .25* .15
	ROUND 2		-113
Gough Inventory	.18		40 550
What I Want to Be Adjective Check List (W.I.B.)	.09		

^{*}Significant at or beyond the 5 percent level of confidence.

APPENDIX C

PROPOSED PLAN FOR GROUP COUNSELING OF PROSPECTIVE AND FIRST-YEAR ELEMENTARY SCHOOL TEACHERS SUBMITTED TO N.I.M.H.

#6. Proposed Plan

Group Counseling of Prospective and First-Year Elementary School Teachers

A. Specific Aims

I. Problem: Mental health experts agree that a large number of people in the United States suffer from various degrees of mental illness. It has been estimated that at least ten per cent of the nation's population are likely to be incapitated by mental disease during their lifetimes. The large majority of these experts are also in agreement that most cases of mental illness are associated with child raising practices characterized by a non-loving, non-supportive, and non-creative learning climate both in the home and in the schools.

It is a fact that children spend, during the school year, approximately thirty-five percent of their waking hours under the direct influence of teachers and other school officials. It also seems true that many of the harmful tensions which children endure relate directly to the expectations associated with school work.

Teachers are the focal point of this tension. They have the power to decrease or increase the harmful type of tension and thus raise or lower the potential for mental health. Research and expert opinion (eg., Carroll [7], Henderson [14], Jersild [16], Menninger [20],) point to the relationship which seems to exist between warm, understanding, creative teachers and students who exibit a healthy attitude toward learning and creative approaches to problem solving.



It is the thesis of this proposal, then, that teachers who have been given the opportunities to work with supportive counselors and to develop a greater degree of self understanding will exhibit supportiveness and creativity in their work with children. This behavior will in turn facilitate the mental health of children who come in contact with these teachers.

2. Specific Goals:

- a. The primary goal of this program is to increase, through group counseling, the level of mental health of prospective and beginning elementary teachers. This broad goal involves guiding prospective elementary and first-year teachers toward:
 - 1. greater self understanding
 - 2. greater self acceptance
 - 3. greater creativity and self actualization
- b. A corollary goal is to increase the ability of prospective elementary teachers to understand, support, and appreciate individual children.
- c. A subsidiary goal is to determine the most effective and practical group counseling program which might be integrated with teacher education programs. Therefore, research related to the following questions will be implemented:
 - 1. Does group counseling of prospective and first-year teachers result in a greater degree of self-understanding, selfacceptance, and creativity?



- 2. Are three years of group counseling more effective than two years or one year? Are two years more effective than one year?
- 3. What is the best time to provide group counseling: junior year, senior year, or during the first year of teaching?
- 4. What influence does the degree of initial willingness of counselees to participate in group counseling have on its effectiveness?
- 5. What are the most helpful aspects of the group counseling sessions?

B. Significance

There is a considerable amount of research evidence indicating that positive benefits may accrue from counseling. Although much of this research pertains to the secondary level of education, it seems appropriate to extrapolate these research data from the secondary to the university level. Since there are too many studies in this area to cite all of them, only a representative sample will be mentioned here. Serene (23), Stasek (26), Baymur (1), and Broedel (2), have reported the effectiveness of counseling in improving the academic achievement of adolescent "underachievers." Turney and Morehead (29), Lund (18), and McLaughlin (19) have reported the effectiveness of counseling on improving the academic achievement of a heterogeneous group of high school students. An extensive report by Campbell (4) of a 25-year follow-up study of the effect of counseling on college students indicated that counseled students achieve at a higher level during college and after.

Counseling has been effective in helping students acquire selfunderstanding, according to studies by Froelich and Moser (II), Singer
and Steffire (24), and Rothney (22). Studies by Caplan (6), Worbois
(30), and Broedel (2) indicate that counseling encourages selfacceptance as well as self-understanding. Counseling has also been
effective in helping students make realistic vocational choices. This
effectiveness has been indicated through studies by Hutson and Webster
(15), Turney and Morehead (29), Nick (21), and Bunting (3). In addition,
counseling leads to greater job satisfaction according to reports by
Cuony and Hoppock (9), Rothney (22), and Cantoni (5).



There has been in recent years a growing interest in group counseling at the college level as a means of assisting students towards better school adjustment. Spielberger, Weitzand, and Denny (25) demonstrated that high-anxiety, experimental subjects who attended group counseling sessions regularly made significant improvement in academic work over nonregular attenders and non-counseled students. A study by Chestnut (8) reports positive gains in grade point average resulting from both structured and unstructured group counseling. Krumboltz (17), using a variety of models, demonstrated that reinforcement counseling in groups had a significant effect on the decision making behavior of students and emphasized the need in group counseling for specific behavioral goals. Dickenson and Truax (10) reported that significant gains resulted when college freshmen underachievers were given group counseling and that the gains were in proportion to the level of counseling and therapy received by the students. Though divergent approaches are represented in the foregoing studies, all appear to reflect promise as techniques for approving student adjustment.

Group counseling of prospective teachers has been utilized to a limited extent in at least four studies sponsored by the National Institute of Mental Health. These studies were as follows: (I) Teacher Education Project at San Francisco State College, (2) Wisconsin Teacher Education Research Project at the University of Wisconsin, (3) Mental Health in Teacher Education Project at the University of Texas, and (4) The Pre-Service Teacher Guidance Study at the Bank Street College of Education. In these four studies a variety of counseling techniques

12

were utilized or developed. Reports of all of these projects (discussed more fully in item 7B of this proposal) indicate positive growth of the participants towards mental health.

The use of group counseling as a means of enhancing the mental health of prospective and beginning teachers seems to hold great promise. The foregoing studies relating to group and individual counseling establish the validity of this process for developing many personal and social correlates of the mentally healthy individual.

It has been widely recognized that one of the permanent goals of teacher training is the development of mentally healthy teachers capable of living productively with stresses and tensions of modern living and in turn able to project a healthy and creative environment for children with whom they work. Such personal development and self understanding can certainly be enhanced through skillfully planned and conducted group counseling sessions integrated with and supplemental to their ongoing training program. Thus, the proposed program would seem to have a high level of significance in the training of prospective and beginning teachers.



C. Resources and Facilities

No special equipment will be required for the conduct of the counseling program beyond class and conference rooms and instructional equipment utilized regularly in the University program. The majority of on campus activities will be carried on in the Education Building completed in 1963. Included in this facility are private counseling offices, a group guidance laboratory and numerous small conference rooms. Modern electronic equipment is contained in the laboratory areas to permit recording and monitoring. The instructional program is supported by TV and instructional lab facilities which may be used as required in the conduct and assessment of the counseling program. Space for small group counseling and interviewing in off campus centers will be readily available in participating school districts.

Research facilities of the University include an outstanding library, laboratory space and modern calculating equipment, and the services of a computing center equipped with IBM System 360, Model 67.

D. Method of Procedure

- elementary teachers will be assigned to groups for purposes of group counseling. Each group will contain eight to twelve members and will attend, during the academic year, a total of ten sessions of approximately two hours duration. Prior to the group counseling sessions, the potential counseless will be asked to indicate their degree of interest in participating in such sessions. The counseling groups will then be selected randomly from among three sub-populations: prospective teachers with high interest, prospective teachers with moderate interest, and first-year teachers with high interest.

 Approximately half of each sub-population will be assigned to counseling groups and the remainder will be designated as "controls".
- 2. Counseling Schedule: The arrangement of the counseling groups is shown in the following chart. This arrangement provides the "A" groups with three years of group counseling, the "B" groups with two years of group counseling, and the "C" and "D" groups with one year of group counseling.

1967-68

Juniors (A)	Seniors (B)	First-Year Teachers (C)
Two High-Interest	Two High-Interest	Two High-Interest
Two Moderate-Interest	Two Moderate-Interest	I. One in Bellevue Area
		2 One in Spokage Area



1968-69

Seniors (A)

First-Year Teachers (B)

Two High-Interest

Two High-Interest

Two Moderate-Interest

1. One in Bellevue Area

2. One in Spokane Area

1969-70

First-Year Teachers (A)

Seniors (D)

Two High-Interest

Two High-Inverest

1. One in Bellevue Area

Two Moderate-Interest

2. One in Spokane Area

3. Selection of Counselees

During the final month of the 1966-67 school year all prospective elementary teachers in their sophomore, junior, and senior years will be asked to indicate their degree of interest in participating in the group counseling experience. The sophomores and juniors (Groups A and B) will be asked to check the following form:

If academic credit is given and a grade of S can be earned for attendance only, I am

- a. very willing
- b. willing
- c. mildly willing
- d. mildly unwilling
- e. unwilling
- f. very unwilling

to participate in the group counseling program.



- If academic credit is not given, I am
- a. very willing
- b. willing
- c. mildly willing
- d. mildly unwilling
- e. unwilling
- f. very unwilling

to participate in the group counseling program.

least "mildly willing" under one of the two conditions. From those who are at least "mildly willing" approximately half will be assigned to counseling groups and the remainder will be designated as "controls." (Those who indicate an unwillingness to participate will serve as another type of control group.) After the counseling groups have been selected, they will be notified that they will receive academic credit for their participation (one semester hour per year) and will receive a grade of S for attendance only.

The graduating seniors (Group C) who have made arrangements to teach the following year in the Bellevue area or the Spokane area will also be asked to indicate their interest in participating, using the same six point scale of willingness. Only those that indicate that they are "willing" or "very willing" will be considered.

During the final month of the 1968-69 school year, all prospective teachers in their junior year (Group D) will be asked to indicate their interest by checking the same form used for sophomores and juniors in the 1966-67 year.

4. Nature of the Counseling Sessions

Juniors and first-year teachers will meet every three weeks for a session lasting approximately two hours. Seniors will meet every two weeks while they are on campus. (They are off campus for nine weeks for student teaching.) Thus, each group will meet ten times during the academic year.

The groups will change counselors each semester (in order to provide some control for the personalities of counselors). It is anticipated that most members of a group will stay together during their counseling experience. This will not be required, however. The only requirement will be that they not have the same counselor two semesters in a row.

The counseling sessions will be designed to examine feelings, attitudes, and values which participants have toward self, peers, adults, and children. The counselor will focus the discussions on the classroom behavior of children but will encourage each participant to carry on self-examination as it relates to his future or present role as a teacher. The counselor will serve as a model of sipportive behavior and will encourage creative problem solving. Case studies initiated by the counselor and the counselees will often be used to stimulate discussion.

5. Responsibilities of Personnel

a. Dr. Andersen will serve as one of the counselors and will supervise the other counselors. He will also expedite the organization and evaluation of the project.



- b. Dr. May will serve as a liaison with the Elementary Education
 Area Committee of the Department of Education and with one of
 the school districts involved. He will also serve as a consultant to the counselors on methods of encouraging creative problem
 solving. In addition, he will expedite the organization and
 evaluation of the project and serve as project co-director.
- c. Dr. McDougall will supervise the entire project, meeting frequently with the directors and counselors to maintain objectives and handle organizational problems. In addition, he will serve as liaison with one of the school districts involved and expedite the evaluation of the project.
- d. Doctoral level graduate students with extensive training and practice in group counseling will be selected to assist Dr. Andersen with the group counseling.

E. Organization Framework

This program will be conducted within the existing framework of teacher education at W.S.U. The present organizational structure provides for close liaison with teachers in their various districts during the first year; thus, the arrangement of counseling in the more populated areas specified in the plan will constitute no difficulties. The arrangement of space and time for counseling, interviewing, and observation in the Spokane and Seattle areas can be arranged since close cooperation is maintained with all these schools and administrators in the regular teacher education program.



F. Evaluation of Results

Near the end of each academic year various inventories will be administered to all counseling and control groups. In addition to empirical analysis, a randomly selected group of participants will be interviewed to elicit subjective reactions as to the nature of behavior changes they perceive resulting from group counseling.

Their reactions to the group counseling program will also be assessed. These responses will be judged and categorized in terms of constructs relating to mental health.

A large portion of first-year teachers who have received group counseling and those first-year teachers designated as controls will be observed as they interact with children in the classroom. A device similar to that developed by Amidon and Flanders will be used to categorize the interactions. Also, the teachers' students will be asked to respond to a brief attitude inventory.

Several instruments are not being analyzed as to appropriateness for measuring behavior change associated with mental health constructs. The instruments include both standardized and newly constructed techniques which are being analyzed through item analysis and intercorrelations and validated against construct and peer rating criteria. The instruments under study include:

- I. California Psychological Inventory
- 2. Minnesota Teacher Attitude Inventory
- 3. Personal Orientation Inventory
- 4. Adjective Checklist designed to measure creative attitudes: locally constructed by May and McDougall



- 5. Creativity measure designed to measure flexible thinking: constructed by May and Metcalf
- 6. A scale to be constructed by May and Flynn to measure attitudes toward the teacher education program.
- 7. Filmed behavior observation test adapted by McDougall and Cabianca from materials provided by the Research Division of the Oregon State System of Higher Education.

Following further empirical analysis a small number of instruments will be selected from the above and applied to both experimental and control groups at the end of each year of teacher education. Appropriate statistical techniques will be applied for data analysis, including tests of significance between experimental and control groups.

It is anticipated that the results of the experimental program will be described and reported in monograph form. It is likely that two monographs will be prepared, one at approximately the end of the first two years of the program and the other upon completion of the total project. These monographs will be in addition to the usual progress and final reports to the sponsoring agency. Consideration will also be given to several dissemination seminars involving administrators, directors of counseling, and personnel involved in teacher training.



#7. Previous Work Done

- A. Two closely related programs are currently being conducted at Washington State University.
 - 1. A project for the development and validation of instruments for assessing the effects of group counseling in the Teacher Education Program at Washington State University is presently being conducted by May and McDougall. Numerous techniques and approaches including inventories, structured observation through filmed behavioral incidents, and peer-group judgments are being tested as to their appropriateness for measuring various mental health constructs. The study has also involved an intensive review of the literature as well as visitations to selected teacher training programs involving mental health emphasis. 1+ is supported by the Small Contract Cooperative Research Division of the U.S.O.E. and is scheduled for completion during the current year. The review of research studies, observation of the selected programs and initial testing of instruments in the study will provide a better base for development of the proposed counseling program.
 - 2. During the current year, as in the past several years, W.S.U. has sponsored academic year counseling and guidance training institutes under the auspices of Title V B of the N.D.E.A. Particularly the last two years intensive use has been made of small group counseling as a technique or vehicle for training school counselors. This experience has stimulated careful analysis of the possibilities and limitations of group counseling as a training device and has also



helped attract and develop the competence of numerous senior staff and doctoral level students. The benefits of this experience will be important in the development of the proposed program.

- B. Four recent teacher education projects in other institutions, all of them originally sponsored by the N.I.M.H., have involved a limited degree of group counseling.
 - I. At the University of Texas, student teachers were, until recently, given opportunities for "modified group therapy sessions." Also offered to the student teachers were group discussion sessions directed toward problems they were experiencing with individual pupils. Subjective assessment indicated positive growth on the part of the prospective teachers as a result of the group counseling. No attempt was made, however, to obtain related objective data or to determine the conditions appropriate for group counseling in a teacher education situation.
 - 2. At the University of Wisconsin, teacher-education students enrolled in an educational psychology course were divided into three groups and taught through three approaches. One of the approaches was similar to a non-directed group counseling program. Although objective data on the prospective teachers was obtained, the evidence was not very conclusive. This lack of conclusiveness was due perhaps to the short duration of counseling-type treatment, and perhaps to the fact that the prospective teachers in the counseling-type situation were given academic grades as in their other courses—thus limiting the relative freedom which counselees should feel in a group counseling experience.

- been involved in weekly unstructured seminars with their studentteaching supervisors, the supervisor acting both as instructor and
 counselor. Although the supervisors are not trained counselors, they
 occasionally bring into the seminar a consultant psychologist or
 psychiatrist and also attend seminars led by the consulting psychologist. Subjective judgments made by the supervisors and a consulting psychologist indicates that considerable growth by the supervisors toward understanding the students and assisting them in
 problem solving has taken place. Little effort has been made, however,
 to systematically evaluate the effects of the "psycho-educational"
 counseling on the students.
- 4. At San Francisco State College, prospective teachers were divided into experimental and control groups, with the experimental groups further divided into "sensitivity groups", a type of group counseling situation. The experimental groups tended to achieve higher scores on objective measures of autonomy and other constructs related to mental health. However, since the experimental groups were composed of "volunteers", it is not certain whether the group counseling experiences were highly effective or whether the individuals who volunteered were fairly autonomous to begin with. Subjective assessment, on the other hand, indicated that the experimental groups had made considerable growth toward mental health.



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